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教育背景

1988 - 1992	**博士研究生**，北京大学数学科学学院 **导师**：应隆安教授

工作经历

2015-	**副教务长**，学科建设办公室主任，北京大学
2010-	**主任**，“数学及其应用”教育部重点实验室
2001-	**常务副主任**，北京大学科学与工程计算中心
2013-2015	**常务副院长**，北京大学数学科学学院
1999-2008	**系主任**，北京大学数学科学学院科学与工程计算系
1996-	**教授**， 北京大学数学科学学院
1994-1996	**副教授**，北京大学数学科学学院
1992-1994	**讲师**，北京大学数学科学学院

研究领域

软物质(复杂流体)的建模和计算
应用分析和数值分析
移动网格方法及其应用

所获荣誉与奖励

2015	**中国科学院院士**
2014	**国家自然科学奖二等奖**
2010	**北京市师德标兵**
2002	**长江学者**
1999	**冯康科学计算奖**

学术兼职

2004-	**副理事长，学术委员会主席**，中国工业与应用数学学会(CSIAM)
2015-	**学术委员会副主任**，“大规模科学与工程计算”国家重点实验室
2010-2014	**副理事长**，中国计算数学学会
2006-	**学术委员会副主任**，北京应用物理与计算数学研究所计算物理实验室
2002-2006	**副理事长**，中国计算数学学会

学术交流

2002-2004	**访问学者**，普林斯顿大学 应用与计算数学系 (5 个月)
1995-1999	**访问学者**，加州理工学院 应用数学系 (23 个月)

杂志编委

2014-	Multiscale Modeling & Simulation, A SIAM Interdisciplinary Journal
2012-	Discrete and Continuous Dynamical System - B
2011-	Journal of Mathematics in Industry (Coordinating Editors)
2010-	Applied Mathematics and Mechanics (Associate Chief-Editor from 2014)
2007-	Journal of Computational Mathematics
2006	Communications in Computational Physics
2005	Communications in Mathematical Sciences
2005-2013	SIAM Journal on Numerical Analysis

代表性论文

Modeling and Simulation of Soft Matter (Complex Fluids)

1. Jiequn Han, Yi Luo, Wei Wang, Pingwen Zhang, Zhifei Zhang, *From Microscopic Theory to Macroscopic Theory: a Systematic Study on Modeling for Liquid Crystals*, **Archive for Rational Mechanics and Analysis**, 215(3), 741-809, (2015)
2. Kai Jiang and Pingwen Zhang*, *Numerical Methods for Quasicrystals*, **Journal of Computational Physics,** 256, 428-440, (2014)
3. Weiquan Xu, Kai Jiang, Pingwen Zhang* and An-Chang Shi*, A Strategy to Explore Stable and Metastable Ordered Phases of Block Copolymers, **Journal of Physical Chemistry B**, 117 (17), 5296-5405, (2013).
4. Chu Wang, Kai Jiang, Pingwen Zhang* and An-Chang Shi*, *Origin of Epitaxies Between Ordered Phases of Block Copolymers*, **Soft Matter,** 7, 10552-10555, (2011)
5. Kai Jiang, Yunqing Huang and Pingwen Zhang*, *Spectral method for exploring patterns of diblock copolymers*, **Journal of Computational Physics,** 229(20), 7796-7805, (2010)
6. Xiuyuan Cheng, Ling Lin, Weinan E, Pingwen Zhang* and An-Chang Shi*, *Nucleation of Ordered Phases in Block Copolymers*, **Physical Review Letters,** 104(14), 148301, (2010)
7. Ling Lin, Xiuyuan Cheng, Weinan E, An-Chang Shi and Pingwen Zhang*, *A numerical method for the study of nucleation of ordered phases*, **Journal of Computational Physics**, 229(5), 1797-1809, (2010)
8. Pingwen Zhang* and Xinwei Zhang, *An efficient numerical method of Landau-Brazovskii model*, **Journal of Computational Physics**, 227 (11), 5859-5870, (2008)
9. Dongzhuo Zhou, An-Chang Shi* and Pingwen Zhang*, *Numerical simulation of phase separation coupled with crystallization*, **Journal of Chemical Physics**, 129, 154901, (2008)
10. Haijun Yu and Pingwen Zhang*, *A kinetic-hydrodynamic simulation of microstructure of liquid crystal polymers in plane shear flow*, **Journal of Non-Newtonian Fluid Mechanics,** 141 (2-3): 116-127 Feb. 15 (2007)
11. Dongzhuo Zhou, Pingwen Zhang* and Weinan E*, *Modified models of polymer phase separation*, **Physical Review E,** 73 (6): Art. No. 061801 Part 1 Jun. (2006)

Applied Analysis and Numerical Analysis

1. Wei Wang, Pingwen Zhang and Zhifei Zhang, The Small Deborah Number Limit of the Doi-Onsager Equation to the Ericksen-Leslie Equation , **Communications on Pure and Applied Mathematics**, 68 (8), 1326-1398, (2015).
2. Wei Wang, Pingwen Zhang and Zhifei Zhang, Well-Posedness of the Ericksen-Leslie System, **Archive for Rational Mechanics and Analysis**, 210 (3), 837-855, (2013).
3. Tiejun Li and Pingwen Zhang, *Mathematical analysis of multi-scale models of complex fluids*, **Communications in Mathematical Sciences,** 5 (1): 1-51 Mar. (2007)
4. Hui Zhang and Pingwen Zhang, *Local existence for the FENE-dumbbell model of polymeric fluids,* **Archive for Rational Mechanics and Analysis**, 181 (2): 373-400 Jul. (2006)
5. Hailiang Liu, Hui Zhang and Pingwen Zhang, *Axial symmetry and classification of stationary solutions of Doi-Onsager equation on the sphere with Maier-Saupe potential*, **Communications in Mathematical Sciences**, 3: 201-218, (2005)
6. Chong Luo, Hui Zhang and Pingwen Zhang, *The structure of equilibrium solutions of one-dimensional Doi equation*, **Nonlinearity**, 18, 379-389, (2005)
7. Weinan E, Pingbing Ming and Pingwen Zhang, *Analysis of the heterogeneous multiscale method for elliptic homogenization problems*, **Journal of the American Mathematical Society** 18 (1): 121-156, (2005)
8. Weinan E, Tiejun Li and Pingwen Zhang, *Well-posedness for the dumbbell model of polymeric fluids*, **Communications in Mathematical Physics**, 248 (2): 409-427, (2004)

Moving Mesh Methods and Applications

1. Yana Di, Ruo Li, Tao Tang and Pingwen Zhang, *Moving mesh finite element methods for the incompressible Navier-Stokes equations*, **SIAM Journal on Scientific Computing,** 26 (3): 1036-1056, (2005)
2. Rou Li, Tao Tang and Pingwen Zhang, *A moving mesh finite element algorithm for singular problems for two and three space dimensions*, **Journal Computational Physics**, 177, 365-393 (2002)
3. Rou Li, Tao Tang and Pingwen Zhang, *Moving mesh methods in multiple dimensions based on harmonic maps*, **Journal of Computational Physics**, 170, 562-588 (2001)